

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	105720	(blad\$9 or skiv\$6 or plat\$6) near10 (bend\$6 or curl\$6 or twist\$5 or wind\$6)	US-PGPUB; USPAT	OR	ON	2005/05/27 21:09
L2	55210	(clean\$6 or wip\$6) near10 (blad\$6 or plate or skiv\$6)	US-PGPUB; USPAT	OR	ON	2005/05/27 21:09
L3	47818	(clean\$6 or wip\$6) near10 (develop\$6 or powder\$8 or toner)	US-PGPUB; USPAT	OR	ON	2005/05/27 21:09
L4	97564	(vibrat\$6 or reson\$9 or fluctuat\$6 or wav\$6 or oscillat\$6 or swing\$6) near10 (blad\$6 or plate or skiv\$6)	US-PGPUB; USPAT	OR	ON	2005/05/27 21:09
L5	28	1 same 2 same 3 same 4	US-PGPUB; USPAT	OR	ON	2005/05/27 20:41
L6	93786	(blad\$9 or skiv\$6 or plat\$6) near10 (bend\$6 or curl\$6 or twist\$5 or wind\$6)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/27 21:09
L7	42493	(clean\$6 or wip\$6) near10 (blad\$6 or plate or skiv\$6)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/27 21:09
L8	28872	(clean\$6 or wip\$6) near10 (develop\$6 or powder\$8 or toner)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/27 21:09
L9	88424	(vibrat\$6 or reson\$9 or fluctuat\$6 or wav\$6 or oscillat\$6 or swing\$6) near10 (blad\$6 or plate or skiv\$6)	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/27 21:09
L10	9	6 and 7 and 9 and 8	EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/27 21:10

DERWENT-ACC-NO: 2001-326842

DERWENT-WEEK: 200134

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TITLE: Electrophotographic image formation, for e.g. digital copier, involves controlled vibration of elastic rubber cleaning blade which contacts photoreceptor, in counter direction to its rotation to remove residual toner on photoreceptor

INVENTOR: ITAMI, A; KITAHARA, Y ; KURACHI, M ; OSHIBA, T ; SAKIMURA, T ; SHIDA, K

PATENT-ASSIGNEE: KONICA CORP[KONS]

PRIORITY-DATA: 1999JP-0178558 (June 24, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 6203962 B1	March 20, 2001	N/A	024	G03G 021/00
JP 2001066963 A	March 16, 2001	N/A	030	G03G 021/10

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
US 6203962B1	N/A	2000US-0597800	June 20, 2000
JP2001066963A	N/A	2000JP-0175201	June 12, 2000

INT-CL (IPC): C08G077/26, C08G077/28 , C08K005/00 , C08L083/08 , C08L101/00 , G03G005/147 , G03G021/00 , G03G021/10

ABSTRACTED-PUB-NO: US 6203962B

BASIC-ABSTRACT:

NOVELTY - Residual toner on a photoreceptor (10) is removed by a rubber blade (19), after transferring toner image onto the recording material. A photoreceptor with a resin layer containing siloxane with cross-linked structure and a structural unit for charge transport, is used. The blade contacts photoreceptor the opposing the photoreceptor rotation direction and is vibrated at an amplitude of 10-200 μ m.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (i) Electrophotographic image forming apparatus; and
- (ii) A processing photoreceptor cartridge for electrophotographic image forming apparatus, to which photoreceptor is integrally provided.

USE - For image forming apparatus (claimed) such as digital copier, printer,

etc.

ADVANTAGE - The amplitude of the rubber blade vibration is controlled at 10-200 mu m, thereby curling of the blade is prevented. Staining of images and other problems, such as spotting and streaking are prevented, the cleaning ability of photoreceptor is improved, and wear on the photoreceptor is reduced.

DESCRIPTION OF DRAWING(S) - The figure shows the schematic drawing of cleaning mechanism.

Photoreceptor drum 10

Elastic rubber blade 19

CHOSEN-DRAWING: Dwg.3/4

TITLE-TERMS: ELECTROPHOTOGRAPHIC IMAGE FORMATION DIGITAL COPY CONTROL VIBRATION ELASTIC RUBBER CLEAN BLADE CONTACT PHOTORECEIVER COUNTER DIRECTION ROTATING REMOVE RESIDUE TONER PHOTORECEIVER

DERWENT-CLASS: A26 A89 G08 P84 S06

CPI-CODES: A06-A00E4; A12-L05C1; A12-L05D; G06-A08; G06-G08;

EPI-CODES: S06-A10A1;

ENHANCED-POLYMER-INDEXING:

Polymer Index [1.1]

018 ; H0124*R ; P1592*R F77 D01

Polymer Index [1.2]

018 ; ND01 ; Q9999 Q8617*R Q8606 ; Q9999 Q8651 Q8606 ; K9676*R ;
B9999 B4013 B3963 B3930 B3838 B3747 ; B9999 B3485*R B3372

Polymer Index [1.3]

018 ; B9999 B3792 B3747

Polymer Index [1.4]

018 ; B9999 B4024 B3963 B3930 B3838 B3747 ; B9999 B5367 B5276

Polymer Index [1.5]

018 ; A999 A340*R

Polymer Index [1.6]

018 ; A999 A497 A486

Polymer Index [2.1]

018 ; R01740 G2335 D00 F20 H* O* 6A ; P1445*R F81 Si 4A ; L9999
L2528 L2506 ; L9999 L2313 ; M9999 M2073

Polymer Index [2.2]

018 ; ND01 ; Q9999 Q8617*R Q8606 ; Q9999 Q8651 Q8606 ; K9676*R ;
B9999 B4013 B3963 B3930 B3838 B3747 ; B9999 B3485*R B3372

Polymer Index [2.3]

018 ; B9999 B4988*R B4977 B4740

Polymer Index [3.1]

018 ; A999 A782 ; A999 A340*R ; P0500 F* 7A ; S9999 S1456*R

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C2001-100311
Non-CPI Secondary Accession Numbers: N2001-234952